

The Effects of Task Reasoning Demand and Dyadic versus Individual Task Conditions on Learner Affective Factors in ESL Classrooms

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Abstract: In light of previous findings that classroom instructional materials contribute towards high anxiety, stress and lack of confidence among learners in Malaysian ESL (English as a Second Language) classrooms, the study aimed to investigate the effects of pedagogical practices on learner affective factors. In particular, the study investigated the main and interaction effects of two levels of Task Reasoning Demand (TRD) and individual versus dyadic Task Conditions (TC) on learner affective factors. The participants were 76 Form six students in a public secondary school in Selangor, Malaysia. Using a quasi-experimental research design incorporating a repeated-measures Latin-square design, participants were randomly assigned to one of four groups. Each group was exposed to all four combinations of the two levels of TRD and two levels of TC, but in different orders. Data were gathered using an affective questionnaire administered after each session. The data collected were analysed using descriptive statistics and repeated-measures MANOVA. Some of the main findings were that both TRD and TC had significant main effects on learner affective factors. The study suggests that educators should consider the effects of TRD and TC on learner affective factors when designing or selecting tasks for classroom use.

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1. Introduction

In Malaysia, learner affective factors including anxiety, lack of confidence and stress have been found to contribute to learner inhibitions in using the English language. Normazidah Che Musa, Koo and Hazita Azman (2012) in a study using document analysis procedures to review and synthesise research papers that examine English language learning in Malaysia from 2001 to 2011 found that one of the factors for low English attainment among Malaysian learners is their unwillingness and high anxiety to use English to communicate. Other than the anxiety and stress originating from the learners themselves, school instructional practices were found to cause language anxiety among learners (Rosemala Ismail, 2008; Noor Hashimah Abdul Aziz, 2007). This finding appears to suggest the need to investigate ways in which pedagogical practices could help reduce learner anxiety, stress and perceptions of difficulty, thus encouraging learners to communicate in English.

2. Task Reasoning Demand (TRD) and Dyadic versus Individual Task Conditions (TC)

In light of the findings in Malaysian classrooms, the researchers believe there is a need in using instructional materials and conditions that could help reduce stress and anxiety among learners. Two variables of interest to the researchers were task reasoning demand (TRD) and dyadic versus

individual task conditions (TC). Studies show that TRD and TC could significantly affect learner affective variables. In a study involving 44 Japanese EFL learners organised into dyads, Robinson (2001) used two versions of a map task; a relatively low complexity task and a relatively high complexity task. A brief questionnaire was administered to the learners after the performance of each task to gauge learners' perceptions of affective variables. In the study, Robinson (2001) found that cognitive demands of tasks and ratings of their difficulty were related. Learners rated the complex version more difficult overall, and more stressful, while they rated their ability to perform the task lower than for the simple version.

Gilabert, Baron and Llanes (2009) also conducted a study to gauge learner perceptions of affective variables based on tasks of different complexity levels. In Gilabert et. al's (2009) study, 54 EFL learners were organised into dyads and carried out three different task-types. A repeated-measures Latin-square design was used with learners performing the six tasks in six different sequences. To measure learners' perception of task complexity, repeated-measures ANOVAs of the affective variables (difficulty, stress, confidence, interest and motivation) were carried out. Like the current study, Gilabert et. al (2009) used Robinson's (2001) affective variable questionnaire for learners to rate

their perceptions of difficulty, stress, confidence, interest and motivation levels when carrying out each task. Results showed that learners graded the three complex versions of the tasks as more difficult. Pairwise comparisons for stress and confidence showed that significant differences were found between the simple and complex versions of the narrative task. The authors concluded that, overall, more complex tasks were perceived as more difficult without the learners finding them less interesting or motivating.

In the case of the current study, two consensus tasks were used. The low complexity task was a revised version of the dictogloss task, while the high complexity task was an opinion-gap task. The topics of the two tasks were matched. However, the provision of content support in the dictogloss task made it less demanding than the opinion-gap task. During the dictogloss task, a short paragraph was read out twice to learners, and they were allowed to jot down notes during the second reading. Thus, the learners already had a general idea of the content of the text, and they had their written notes to aid them during the text-reconstruction stage. They were then required to reconstruct the text through discussions in dyads (dyadic TC) or on their own (individual TC). However, during the opinion-gap task, only a topic with two points for arguments was given to the learners. Thus, they had to access their schemata, select relevant information, build on the knowledge through interaction with other learners, express preference and feelings, argue and reason, justify their arguments, and provide cause-effect relationships during the dyadic TC and form arguments in their own minds during the individual TC. Thus, in terms of reasoning demands, the dictogloss task was considered relatively less demanding (-TRD) compared to the opinion-gap task (+TRD).

In terms of task condition, Dörnyei's (2002) study on the motivational basis of language learning tasks with dyadic and individual learning conditions indicate that dyadic TC would have a positive effect on learner affective variables compared to individual task conditions. In his study involving 44 learners, an oral argumentative task and a self-report questionnaire that focused on attitudinal and motivational issues were administered. The correlation coefficient results showed that the dyads reported considerably higher coefficients compared to the individual students. The variables that were tested included self-confidence and L2 use anxiety.

Understanding the effects of task types and individual versus dyadic task conditions on learner affective factors could assist teachers in selecting, designing and administering tasks for optimum

effects on learner confidence and motivation. Though a few studies (e.g., Robinson, 2001; Gilabert, 2005) have investigated the effects of task reasoning demand on learner affective factors, they did not study the effects of participation conditions on those affective factors. There were also studies (e.g., Michel, Kuiken, and Vedder, 2007; Pica & Doughty, 1998; Gass and Varonis, 1985) that investigated the effects of participation conditions on L2 learning, but they did not investigate the effects of these conditions on learner affective factors. Thus, the current study attempts to fill in the gap in the research by investigating the main and interaction effects of task reasoning demand and individual versus dyadic task conditions on learner affective factors.

3. Research Question and Hypothesis

The study aimed to investigate the main and interaction effects of two levels of Task Reasoning Demand (TRD) and individual versus dyadic Task Conditions (TC) on learner affective factors. In particular, this study sought to answer the following research question:

What are the main and interaction effects of Task Reasoning Demand (TRD) and dyadic versus individual Task Conditions (TC) on learner perceptions of affective variables?

The following research hypothesis was formulated for the study:

The +TRD and individual TC will result in higher difficulty and stress levels compared to the -TRD task and dyadic TC.

4. Research Methodology

As the experimental conditions could be re-ordered, a counterbalancing and Latin-square analysis was used. In a Latin-square design, an equal number of subjects receive each treatment in each position. Treatments are assigned at random within rows and columns, with each treatment once per row and once per column, in order to control for variation in two directions; condition and sequence (Steel and Torrie, 1980). In the current research the conditions in the tasks were as follows;

- a) + Task Reasoning Demand (+TRD), individual (ind.)
- b) - Task Reasoning Demand (-TRD), individual (ind.)
- c) + Task Reasoning Demand (+TRD), dyad
- d) - Task Reasoning Demand (-TRD), dyad

Students from four intact classes were randomly assigned to one of four groups. Table 1 shows the order of task administration in the four groups. Using a Latin-square design, each group is exposed to all combinations of TRD and dyadic versus individual TC, but in a different order. This helps reduce the chances that changes or outcomes are due to the learners' perception of the tasks

(subject characteristic threat). Also, putting the treatments in different orders in the groups helps reduce the threat that change is a result of task-sequencing (Fraenkel and Wallen, 2008). Each of the four sessions involved the use of three tasks at a 1 to 3 day interval.

Table 1: Order of administration of tasks

Group	Session*			
	1	2	3	4
Group 1 N= 20	+TRD, dyad	-TRD, ind.	+TRD, ind.	-TRD, dyad
Group 2 N= 20	-TRD, ind.	+TRD, ind.	-TRD, dyad	+TRD, dyad
Group 3 N= 18	+TRD, dyad	-TRD, ind.	-TRD, dyad	+TRD, ind.
Group 4 N= 18	-TRD, dyad	+TRD, dyad	+TRD, ind.	-TRD, ind.

*Each session involved the use of three tasks at a 1 to 3 day interval, TRD=Task Reasoning Demand, ind=individual

5. Interaction-based Research

The current research is an interaction-based research which Mackey and Gass (2005, p.65) define as “research in which the focus is learners’ conversational interactions with others and the developmental benefits of such interactions”. They further explain that the most common way of gathering data is by engaging learners in various carefully planned tasks.

The two tasks used were consensus tasks. Consensus tasks involve pairs or groups of learners who must come to an agreement on a certain issue. Mackey and Gass (2005) classify a dictogloss task as a consensus task, as learners would have to work together in a pair or in a group to reconstruct a text while maintaining its original meaning. The opinion-gap task used in the current research is also a consensus task, as learners have to discuss the issues given and come to a shared decision.

Students were grouped in dyads because each student would have a greater chance of producing language in a pair than they would in a group. Self-selected dyads were allowed to encourage the learners to feel comfortable in completing the tasks. To ensure that the learners were always on task, the researcher with the help of the class’ English language teacher monitored the learners closely. After each session, a questionnaire was administered to the learners to gauge the learners’ perceptions of the tasks’ difficulty levels.

6. Participants

The current study was carried out in a secondary school in Selangor, Malaysia. This school was chosen as it had a sufficient number of Form 6 students (N = 76) to conduct a quasi-experimental

study with four groups and two independent variables. Form 6 is equivalent to pre-university and the students were all 18 years old. Table 2 summarises the basic profile of the learners.

Table 2: Learner characteristics

Gender	Male	32
	Female	44
L1 Background	Malay	17
	Chinese	48
	Tamil	11

7. Instrumentation and scoring

This study employed the usage of teaching materials (for the dictogloss and opinion-gap tasks) and a brief questionnaire.

7.1 Tasks

The researcher developed and adapted the dictogloss and opinion-gap tasks for use in the four classes.

7.1.1 The dictogloss Task (-TRD)

The dictogloss or passage reconstruction task (Nabei, 1996; Wajnryb, 1990) consists of a series of stages. The lessons started with pre-task activities to ease learners into the topic. Then, learners listened to a short, dense passage during which they were instructed to listen only and not write anything down. Next, they listened to passage a second time and were allowed to jot down notes, but not complete sentences. Then, working in pairs, learners pooled their notes together and attempted to reconstruct their own written version of the passage. It was during this reconstruction phase that learners produced LREs as they searched for correct words or forms they needed in order to convey their intended meaning and write a cohesive text. During the sessions involving learners working as individuals, instead of pooling notes with a partner and reconstructing the text together, learners worked on it individually. Finally, the instructor collected all the texts produced in dyads for purpose of data analysis, and affective questionnaires were administered to gauge learners’ overall perceptions of the task difficulty level during dyadic and individual TCs.

7.1.2 The Opinion-gap Task (+TRD)

An opinion-gap task would require students to give their opinions based on given issues in pairs. The topics for the opinion-gap tasks were matched as closely as possible to the topics for the dictogloss tasks. The three main topics were school life, social issues, and environmental issues. These topics were chosen as they correspond to the topics in their syllabus. The topics were then broken down into a question each for students to discuss. For example, under the topic “school life”, the question given was “what is the best way to improve the school canteen

and why?" Two options were also given "(a) improve on the quality of food served (b) reduce the price of food sold". In each pair, student A had to argue in support of option A, while student B had to argue in support of point B. Students discussed their opinions in pairs and wrote the outcome of their discussion in one paragraph of approximately 100 words (similar to the number of words in the dictogloss text). During the sessions involving learners working as individuals, instead of dealing with the task with a partner, learners worked on it individually. Finally, the instructor collected all the texts produced in dyads or individually for the purpose of data analysis, and affective questionnaires were administered to gauge learners' overall perceptions of the task difficulty level.

8. Questionnaire

A post-task difficulty questionnaire adapted from Robinson (2001) was administered to the learners after each task to assess "overall perceptions of the difficulty of cognitively complex, and cognitively simpler task versions" (Robinson, 2007, p. 196). Following Robinson (2001), questionnaire used a 9-point likert scale. Students were asked whether they thought the task was difficult, whether they felt stressed performing the task, whether they were confident they were able to do the task well, whether they thought the task was interesting, and whether they wanted to do more tasks similar to the given task. The brief questionnaire administered after each lesson was worded as follows:

I thought this task was hard	1 2 3 4 5 6 7 8 9	I thought this task was easy
I felt stressed doing this task	1 2 3 4 5 6 7 8 9	I felt relaxed doing this task
I did not do this task well	1 2 3 4 5 6 7 8 9	I did this task well
This task was not interesting	1 2 3 4 5 6 7 8 9	This task was interesting
I don't want to do more tasks like this	1 2 3 4 5 6 7 8 9	I want to do more tasks like this

Learners were asked to circle each item at the end of each lesson. They had to circle only one number for each item with the numbers ranging from 1 to 9. Each learner had to circle the number that best represents the degree to which they agree with either one of the statements on the two ends of the range of numbers.

9. Data analysis

Research Question: What are the main and interaction effects of Task Reasoning Demand (TRD) and dyadic versus individual Task Conditions (TC) on learner perceptions of affective variables?

Table 3 shows the descriptive statistics of the learners' perceptions based on the affective variables. The variables were (i) the level of difficulty learners experience while completing each task in the dyadic or individual TC, (ii) the learners' ratings of stress caused by the task and the dyadic or individual TC, (iii) their perceived ability in completing the tasks well during individual or dyadic TC, (iv) their interest in the task type as they performed the task in dyadic or individual TC, and (v) their motivation to attempt similar tasks in the same dyadic or individual TC. Table 3 shows the descriptive statistics obtained from the questionnaires on affective factors. In the table, the affective variables are coded as difficulty, stress, ability, interest, and motivation respectively.

Table 3: Descriptive statistics of the effects of TRD and dyadic vs. individual TC on affective perceptions

	Difficulty		Stress		Ability		Interest		Motivation	
	M	SD	M	SD	M	SD	M	SD	M	SD
+TRD										
Dyad	3.26	1.36	3.83	1.41	4.28	1.29	4.45	1.25	4.84	1.37
Ind.	2.77	1.98	3.54	1.29	3.93	1.30	1.25	1.25	4.01	1.32
-TRD										
Dyad	5.07	1.82	5.24	1.63	5.56	1.60	5.34	1.50	5.70	1.41
Ind.	4.78	1.70	4.77	1.40	5.10	1.28	5.25	1.23	5.43	1.07

TRD= Reasoning Demand, Ind.= individual, M= Mean, SD= Standard Deviation

Table 3 shows that the highest mean in the learners' perceptions of task difficulty was achieved in the dyadic TC with low task reasoning demand (M = 5.07). This indicates that learners found that doing a task of relatively low reasoning demand in dyads was the least difficult. The lowest mean for difficulty was found in the high reasoning demand task done individually (M = 2.77). This indicates that learners found the high reasoning demand task done individually to be the most difficult. The stress scores indicate that learners found the high reasoning demand task done individually to be the most stressful (M = 3.54), followed by the high reasoning demand task done in dyads (M = 3.83), and the low reasoning demand task done individually (M = 4.77). The least stressful task was found to be the low reasoning demand task done in dyads (M = 5.24). Learners' perceptions of their abilities to complete the tasks well also show that they were least confident of their abilities when doing the high reasoning demand task individually (M = 3.93) and the most confident when they were doing the low reasoning demand task in dyads (M = 5.56). Learners also showed the lowest interest in the high reasoning

demand task done individually ($M = 1.25$) and the highest interest in the low reasoning demand task done in dyads ($M = 5.10$).

Finally, learners showed the lowest motivation to do the high reasoning demand task individually ($M = 4.01$) and the highest motivation to do low reasoning demand tasks in dyads ($M = 5.70$). Results from the descriptive statistics appear to show a match in learner perceptions of task difficulty based on affective variables and high and low task complexity levels with the +TRD task resulting in greater difficulty and stress levels, and lower confidence in ability, interest and motivation levels. Also, learners have greater difficulty and stress levels, and lower confidence in ability, interest and motivation levels when engaged in tasks individually rather than in dyads. It is also interesting to note that the lowest mean score recorded in the "high reasoning demand task done individually" category ($M = 1.25$) was for interest in the tasks. This indicates very low interest in individually engaging in tasks that the learners found the most difficult and stressful. Meanwhile, the highest mean score was recorded in the "low reasoning demand task done in dyads" category ($M = 5.70$). This mean score indicates moderate motivation levels to perform more of these tasks which the learners also found to be moderately difficult ($M = 5.07$), moderately stressful ($M = 5.24$), moderately interesting and pose moderate challenge to their abilities ($M = 5.56$).

In order to determine the main and interaction effects of +/- TRD and dyadic versus individual TC on affective variables, a repeated-measures MANOVA was run. There were no between-subject effects to be measured as all learners were exposed to both levels of TRD and TC. Instead, the within-subject effects of the two variables were measured for their effects on affective variable scores using repeated-measures MANOVA. As mentioned in the previous chapter, MANOVA is often preferred over a series of ANOVAs if there are possible relationships among the variables to be tested. In the case of the current research, previous research (e.g., Gilabert, 2009, Robinson, 2001) has shown that the five affective variables could have relationships among them as a result of the effects of TRD and TC. Prior to running MANOVA, the Bartlett's test of sphericity was used to determine whether it was justified to apply a MANOVA test rather than a series of ANOVAs. Results of the test are shown in table 4.

Results of the Bartlett's test of sphericity indicate that Task Reasoning Demand, dyadic versus individual Task Conditions and the interaction between Task Reasoning Demand and Task Condition do have significant effects on the

dependent variables ($p < .05$). Thus, it would be appropriate to proceed with MANOVA. The table below shows the main and interaction effects of TRD and dyadic and individual TCs on the affective variables using repeated-measures MANOVA with the Wilks' Lambda test.

Table 4: Bartlett's Test of Sphericity

Effect	Likelihood Ratio	Approx. Chi-square	df	Sig.
Within-subjects				
TRD	.000	339.96	14	.00
TC	.000	325.49	14	.00
TRD*TC	.000	329.70	14	.00

TRD= Task Reasoning Demand, TC= Task Condition

Table 5: Impact of TRD and TC on affective variables (repeated-measures MANOVA, Wilks' Lambda test)

Source	F	df	Error df	p
TRD	24.48	5	71	.00
TC	3.36	5	71	.01
TRD *TC	4.58	5	71	.06

TRD= Task Reasoning Demand, TC= Task Condition

According to the Wilks' Lambda test of the repeated-measures MANOVA, Task Reasoning Demand had a significant effect on affective factors ($p = .00$). The same goes for dyadic and individual Task Conditions ($p = .01$). However, the interaction between Task Reasoning Demand and dyadic and individual Task Conditions was not significant ($p = .06$).

Though the multivariate test informs us of the significance of at least one mean pairing within the +/- TRD and dyadic versus individual TC, it is unclear for which affective factor the observed mean difference is significant. In order to determine the significance of the differences, pair-wise comparisons were then run to identify the specific mean difference between dyadic and individual Task Conditions and +/-TRD for each of the affective variable. Results are shown in tables 6 and 7.

Table 6: Pairwise comparisons between dyadic and individual TC based on affective factors

Factor	(I) TC	(J) TC	Mean Difference (I-J)	p
Difficulty	Dyad	Individual	.39	.04
Stress	Dyad	Individual	.38	.02
Ability	Dyad	Individual	.41	.02
Interest	Dyad	Individual	.31	.05
Motivation	Dyad	Individual	.55	.00

* $p < .05$, TC= Task Condition

Table 6 shows that dyadic and individual Task Conditions had significant effects on all five affective variables ($p \leq .05$). The largest mean difference was for motivation level (mean difference = .55, $p = .00$). The positive result indicates that there were significantly higher levels of motivation when learners dealt with tasks in dyads rather than individually. Meanwhile, the smallest mean difference was for learners' interest in dealing with the tasks (mean difference = .31, $p = .05$). This would indicate that either being in dyads or working individually would have the least effect on the learners' interest levels. The positive mean difference for all five variables would indicate that dealing in tasks in dyads rather than individually had more positive effects on affective variables.

Next, pairwise comparisons were run to identify the specific mean difference between tasks with high and low TRD for each affective variable. Results are shown in table 7.

Table 7: Pairwise comparisons between +TRD and -TRD based on affective factors

Factor	(I) TRD	(J) TRD	Mean Difference (I-J)	<i>p</i>
Difficulty	+TRD	-TRD	- 1.91	.00
Stress	+TRD	-TRD	- 1.32	.00
Ability	+TRD	-TRD	- 1.22	.00
Interest	+TRD	-TRD	- 1.10	.00
Motivation	+TRD	-TRD	- 1.14	.00

TRD= Task Reasoning Demand

Table 7 shows that TRD levels had significant effects on all five affective variables ($p \leq .05$). The largest mean difference was for difficulty level (mean difference = -1.91, $p = .00$). The negative mean difference indicates that learners perceived the +TRD task as significantly more difficult than the -TRD task. Meanwhile, the smallest mean difference was for learners' interest in dealing with the tasks (mean difference = -1.10, $p = .00$). This would indicate that TRD level would least affect the learners' interest levels as opposed to the other four affective variables. The negative mean difference for all five variables would indicate that the +TRD task rather than the -TRD task had more negative effects on affective variables. In other words, learners perceived lower levels of motivation, interest, and ability, as well as higher levels of stress and difficulty when dealing with +TRD task as opposed to -TRD task.

10. Hypothesis testing: The +TRD and individual TC will result in higher difficulty and stress levels compared to the -TRD task and dyadic TC.

This section discusses the research findings in relation to the research hypothesis. This hypothesis

is answered by analysing the main effects of TRD on selected affective variables (i.e., perceived difficulty, stress, ability, interest and motivation), the main effects of TC on the affective variables and the interaction effects of TRD and TC on the affective variables.

This research hypothesis is heavily influenced by the Cognition Hypothesis put forth by Robinson (2007). The Cognition Hypothesis claims that "the more cognitively complex tasks will be perceived by all learners to be more difficult than less complex counterparts" (Robinson, 2007, p. 196). This claim was supported by the results of the current study. Results indicated that learner perceptions of task difficulty levels appear to correlate with the researcher's distinction of the opinion gap task and dictogloss task in relation to task complexity levels. This is reflected by the significantly higher rates of difficulty, stress, perceived ability to complete the task, interest and motivation for the +TRD task (opinion-gap) compared to the -TRD task (dictogloss). This is perhaps why Skehan and Foster (2001) used task complexity interchangeably with task difficulty to refer to the amount of attention a task demands from participants. Though Robinson (2007) makes the distinction between task difficulty (i.e., influenced by learner factors) and task complexity (i.e., influenced by task inherent factors) and cautions against assuming a fixed relationship between the two, he too agrees that task difficulty and task complexity would correlate as more complex tasks result in higher stress levels and perceived difficulty across learners.

As predicted in the research hypothesis, the individual TC was also found to result in significantly higher difficulty and stress levels compared to the dyadic TC. In addition, the individual TC also resulted in significantly lower confidence levels and motivation levels compared to the dyadic TC. These results point to the beneficial effects of engaging in tasks in dyads as opposed to working on tasks individually.

In sum, the current study appears to corroborate the findings of Robinson (2001) and Gilabert et. al's (2009) studies with regards to the effects of task complexity on affective variables. Though differentials among learners in terms of inherent ability could affect perceptions of task difficulty levels (Robinson, 2001), the results indicate that the more complex tasks would result in greater perceptions of overall difficulty and stress, and lower ratings of confidence in ability. This study also found that TC can have an effect on affective variables. In particular, the dyadic TC was found to have more positive effects on learner affective factors compared to the individual TC, as predicted by the hypothesis.

This would further consolidate the benefits of engaging learners in interactive tasks as opposed to monologic or individual tasks.

11. Conclusions

One of the findings of the study is that engaging in interaction to complete tasks could have positive effects on learner affective variables. The findings show that the dyadic task condition could have greater benefits on motivation levels, stress levels, confidence levels, interest and perceived ability to complete tasks compared to the individual task condition. Dörnyei (2002) contends that motivation is co-constructed or encouraged by task participation. Dörnyei's (2002) assertion, along with the findings of the current study, provides evidence for teachers to use dyadic interaction in the L2 classroom to enhance motivation and other affective variables. Also, though several studies (e.g., Michel et al., 2007; Pica & Doughty, 1998; Gass and Varonis, 1985) have investigated the effects of task conditions on L2 learning, they do not investigate the effects of these task conditions on learner affective factors. Thus, the current study provides valuable insights by providing some evidence of the beneficial effects of dialogic tasks on learner affective factors in the L2 classroom.

Results of the current study provided rather substantial support for Robinson's Cognition Hypothesis. In line with results from previous research (e.g., Robinson, 2001; Gilabert, 2005), the findings of the current research indicated that the more complex task resulted in significantly higher ratings for perceptions of overall difficulty and stress, and lower ratings for confidence to perform well in the task. Also, the results showed that engaging in interaction in dyads as opposed to dealing with the tasks individually had positive effects on affective factors.

Results of the study would then have pedagogical implications on teaching practices, task selection, and task implementation. The study indicated that interactive tasks could have positive effects on learner affective factors as opposed to individual tasks. Also, task complexity levels would have differential effects on learner affective factors. Thus, task complexity must be taken into consideration when selecting, designing or adapting tasks for use in the ESL classroom.

References

1. Dörnyei, Z. (2002). The motivational basis of language learning tasks. In Peter Robinson (Ed.) *Individual differences in second language acquisition* (pp. 137-158). Amsterdam: John Benjamins.
2. Fraenkel, J.R., and Wallen, N.E (2008). *How to design and evaluate research in education* (7th ed.) New York: McGraw-Hill.
3. Gass, S., & Varonis, E. (1985). Task variation and nonnative/nonnative negotiation of meaning. In S. Gass & C. Madden (eds.) *Input in Second Language Acquisition* (pp. 149-161). Rowley, MA: Newbury House.
4. Gilabert, R. (2005). *Task complexity and L2 narrative oral production*. Unpublished Doctoral dissertation, The University of Barcelona, Spain.
5. Gilabert, R., Baron, J. and Llanes, M. (2009). Manipulating cognitive complexity across task types and its impact on learners' interaction during oral performance. *IRAL*. 47: 3676-395.
6. Huberty, C. J, and Morris, J. D. (1989). Multivariate analysis versus multiple univariate analyses. *Psychological Bulletin*. 105: 302-308.
7. Mackey, A., and Gass, S. M. (2005). *Second language research: Methodology and design*. Mahwah, NJ: Lawrence Erlbaum Associates.
8. Michel, M. C, Kuiken, F., and Vedder, I. (2007). The influence of complexity in monologic versus dialogic tasks in Dutch L2. *IRAL*. 45: 241-259.
9. Nabei, T. (1996). Dictogloss: Is it an effective language learning task? *Working Papers in Educational Linguistics*. 12(1): 59-74.
10. Noor Hashimah Abdul Aziz. (2007). ESL students' perspectives on language anxiety. Unpublished Ph.D. thesis, Universiti Putra Malaysia: Serdang.
11. Pica, T. and Doughty, C. (1998). Variation in classroom interaction as a function of participation pattern and task. In J. Fine (Ed.) *Second language discourse*. (pp. 41- 55). Norwood, NJ: Ablex.
12. Robinson, P. (2001). Task complexity, task difficulty, and task production: Exploring interactions in a componential framework. *Applied Linguistics*. 22: 27-57.
13. Robinson, P. (2007). Task complexity, theory of mind, and intentional reasoning: Effects on L2 speech production, interaction, uptake and perceptions of task difficulty. *IRAL*. 45: 193-213.
14. Rosemala Ismail. (2008). Factors affecting less proficient ESL learners' use of strategies for language and content area learning. Unpublished Ph.D. thesis. Faculty of Modern Languages, Universiti Putra Malaysia Serdang.
15. Steel, R.G.D. and Torrie, J.H. (1980). *Principles and procedures of statistics*. New York: McGraw-Hill.
16. Wajnryb, R (1990). *Grammar dictation*. Oxford: Oxford University Press.